

GEA SMARTPUMP



# GEA Hilge TP

Single-stage Centrifugal Pumps  
for Standard Applications

# Sustainable and Economical Application Under Hygienic Conditions

The energy-efficient and hygienic GEA Hilge TP centrifugal pumps in the GEA SMARTPUMP line are available in a variety of model sizes, optimally configured for different applications.

The GEA Hilge TP is a centrifugal pump designed for the hygienic pumping of biologically demanding media. Low flow velocities and gentle discharge of media through the spiral housing enables extremely gentle product handling. Eleven different pump types are available covering a capacity range up to 1057 gpm and flow heads up to approx. 430 ft., fine tuned for each task.

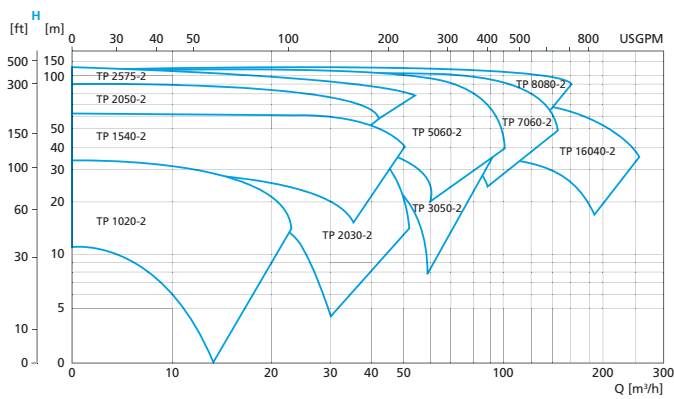
The spiral housing for the GEA Hilge TP series is made of cold-rolled steel. This material has an excellent surface quality, which is essential for optimum cleaning in CIP/SIP processes.

The GEA Hilge TP pump series is 3A and EHEDG certified. Typical wall thicknesses of 8 mm (TP 1020 6 mm) provide high strength.

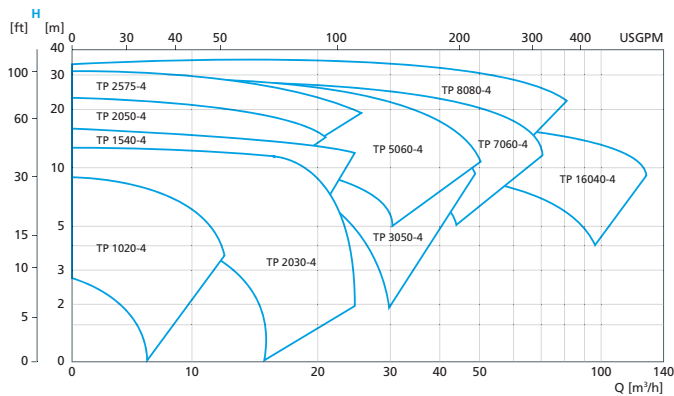
## TECHNICAL DATA

GEA Hilge TP	60 Hz
Flow	1057 gpm (240 m <sup>3</sup> /h)
Head	427 ft (130 m)
Media temperature	284°F (140°C)
Operating pressure	232 psi (16 bar)

### GEA HILGE TP PERFORMANCE CURVE, 60 Hz 2-POLE, 3500 RPM

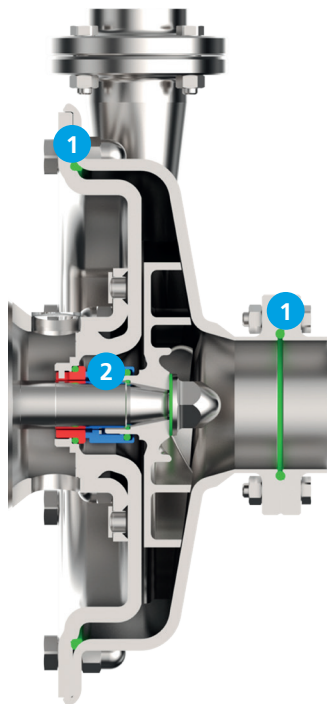


### GEA HILGE TP PERFORMANCE CURVE, 60 Hz 4-POLE, 1750 RPM





## FEATURES AND BENEFITS



1 Gapless sealing

2 Sterile mechanical seal

### Applications

The GEA Hilge TP series has been designed for a variety of applications within:

#### Breweries

- Beer
- Wort
- Yeast
- Water
- CIP Solutions

#### Dairies

- Milk
- Cream
- Yogurt
- Whey
- Brine
- CIP Solutions

#### Cosmetics

- Extracts
- Emulsions
- Distillates

### Application options GEA Hilge TP

- Conveying
- Circulation
- Pressure boosting
- Filling lines
- Filling
- Emptying
- Filtration
- Evaporation
- Cleaning

### Technical benefits

- Operating pressure max. 232 psi
- Low NPSH value avoids early cavitation to the pump
- Energy-efficient operation, thanks to optimized speed control and/or impeller trimming

### Constructive characteristics

- Open impeller design optimized for gentle product handling
- All parts stainless steel, wetted components made of AISI 316L
- Surface roughnesses of  $R_a \leq 31.5 \mu\text{in}$  ( $0.8 \mu\text{m}$ ) can be achieved by mechanical treatment of the surface (higher surface qualities on request)
- Premium efficient motors and washdown motors

### Special characteristics

- Gentle product handling
- Low wear part stock requirement thanks to modular concept
- Acceptance test certification 3.1 (optional)
- 3A and EHEDG certified
- Sealings comply to FDA and USP Class VI

### Mechanical seal optimized for hygienic applications

- Mechanical seal unit can be removed from the front
- Flushing unit easy to retrofit
- Pump shaft protected by wear sleeve
- Only two mechanical seal sizes for the entire pump series
- Seal face material options: carbon/silicon carbide (standard), silicon carbide/silicon carbide
- Various elastomers with FDA approval (EPDM, FKM)

### Sealing of GEA Hilge TP centrifugal pumps according to EHEDG standards

The elastomer sealing is executed according to EHEDG standards. The special groove enables the seal to be kept reliably in place at all times. The shape of the groove is based on FEM analyses. The metallic stop allows a defined compression of the seal, ensuring gap-free sealing against the product chamber without dead corners.





## We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA is a global technology company with multi-billion euro sales operations in more than 50 countries. Founded in 1881 the company is one of the largest providers of innovative equipment and process technology. GEA is listed in the STOXX® Europe 600 Index. In addition, the company is included in selected MSCI Global Sustainability Indexes.

### GEA North America

33 McAlister Farm Road  
Portland, ME 04103  
Toll-Free 866 531 5629  
Fax 207 878 7914

### GEA Canada

5045 South Service Road, Suite 201  
Burlington, Ontario L7L 5Y7  
Tel 289 288 5500

Email [sales.unitedstates@gea.com](mailto:sales.unitedstates@gea.com)  
[gea.com](http://gea.com)